

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
SHERMAN DIVISION

THE STATE OF TEXAS, et al.,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

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Civil Action No. 4:20-CV-957-SDJ

**DEFENDANT GOOGLE LLC'S ANSWER AND  
AFFIRMATIVE DEFENSES TO PLAINTIFFS' COMPLAINT**

Plaintiffs' Complaint reflects a deep misunderstanding of the digital advertising sector in general and Google's ad tech products and services in particular. The Complaint also misstates the relevant framework set by America's antitrust laws. Plaintiffs' attempt to argue that Google has a monopoly in digital advertising depends upon gerrymandered market definitions that exclude Google's most significant competitors. And while antitrust laws are in place to promote *consumer welfare*, the 358 paragraphs of Plaintiffs' Complaint say remarkably little about how this lawsuit would help consumers. That's because it would actually break many of the services that facilitate the kind of high-quality, relevant advertising that helps consumers connect with merchants and see a wide choice of goods and services. The government intervention sought by Plaintiffs would do significant harm to the many businesses, large and small, who choose to use Google's effective advertising services, with a ripple effect of unintended consequences.

Google's products have made it far easier for advertisers to place effective, user-friendly ads and for publishers to generate income from their content. Advertisers and publishers choose Google's ad tech products because of the quality of those products, not because they are forced to use them. Google's policies take into account the sometimes conflicting demands of publishers, advertisers, and consumers, in the interests of creating a level playing field in which the most useful ads are seen by the most relevant audiences. Google's hard work, innovation, and investment have simply created products that are better in many ways than competitors' offerings.

Even so, advertisers and publishers who choose not to use Google's ad tech products – or who want to use other products in addition to Google's – have a wide array of competitive alternatives available throughout the digital advertising sector.

In short, competition is working in digital advertising. Competition has made online ads safer, more effective, and less intrusive to consumers. Entry and innovation are thriving, output is

expanding, and ad quality is increasing. The last thing this competitive marketplace needs is radical government intervention that would harm consumers and businesses, especially in the form of Plaintiffs' extreme demands to "break up" a successful American company.

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Defendant Google LLC ("Google") answers Plaintiffs' Complaint as set forth below. Except to the extent specifically admitted herein, Google denies each and every allegation contained in the Complaint, including all allegations contained in headings or otherwise not contained in one of the Complaint's 358 numbered paragraphs. Google generally denies the legal claims asserted in the Complaint and responds to the Complaint's numbered paragraphs as follows.

### **RESPONSE TO NUMBERED PARAGRAPHS**

The section headings in the Complaint do not require a response. To the extent that the section headings contain allegations requiring a response, Google denies all such allegations.

1. Google admits that Plaintiffs' Complaint seeks to assert various claims under federal and state laws, but denies that Plaintiffs' have adequately stated a claim under any of those laws and denies that Google has violated any of those laws.

2. Google admits that it was founded over twenty years ago and that its business has expanded beyond internet search over the past 20 years. Google denies the allegations in Paragraph 2 in all other respects.

3. Google admits that its parent company, Alphabet, Inc., had revenue exceeding \$161 billion in 2019, but denies that these allegations apply to Google LLC, the Defendant in this case. Google denies the allegations in Paragraph 3 in all other respects.

4. Google admits that it operates an ad exchange used by advertisers and publishers and that it offers tools that advertisers can use to purchase display advertising inventory. Google

denies the allegations in Paragraph 4 in all other respects.

5. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 5 in all other respects.

6. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 6 in all other respects.

7. Google admits that it acquired DoubleClick in 2008. Google denies the allegations in Paragraph 7 in all other respects.

8. Google admits the existence of an industry publication containing the quoted language, to which publication Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 8 in all other respects.

9. Google admits the existence of a technology known as header bidding, and that header bidding was designed to allow publishers to send bid requests for their inventory to multiple exchanges and other demand sources and to evaluate the responses to such requests. Google denies the allegations in Paragraph 9 in all other respects.

10. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 10 in all other respects.

11. Google admits that, beginning in 2016, it introduced a feature then known as “Exchange Bidding in Dynamic Allocation” that permitted multiple exchanges to participate in auctions within Google’s services; that it had a project codenamed [REDACTED]; and the existence of a document containing the quoted language, to which document Google refers the Court for a

complete and accurate statement of its contents. Google denies the allegations in Paragraph 11 in all other respects.

12. Google admits that Facebook is one of Google's largest competitors; that Facebook made an announcement about header bidding in March 2017; and that Facebook's ad network is called the "Facebook Audience Network" or "FAN." Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third, fourth, seventh, and eight sentences of Paragraph 12 and on that basis denies those allegations. Google denies the allegations in Paragraph 12 in all other respects.

13. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth sentence of Paragraph 13 and on that basis denies those allegations. Google denies the allegations in Paragraph 13 in all other respects.

14. Google admits that it competes head-to-head with Facebook as bidders on behalf of their respective advertiser customers in auctions and that the internal codename for Google's [REDACTED] with Facebook is [REDACTED]. Google denies the allegations in Paragraph 14 in all other respects.

15. Google denies the allegations in Paragraph 15.

16. Google denies the allegations in Paragraph 16.

17. Google admits that online advertising helps publishers afford to create and provide content to users, and that online advertising significantly contributes to enabling a free and open internet. Google denies the allegations in Paragraph 17 in all other respects.

18. Google denies the allegations in Paragraph 18.

19. Google denies the allegations in Paragraph 19.

20. Google admits that Plaintiffs purport to bring this action in their respective sovereign capacities, as *parens patriae*, and pursuant to Section 4 and 16 of the Clayton Act. Google denies the allegations in Paragraph 20 in all other respects and denies that this action serves the citizens, general welfare, or economy of any of the Plaintiffs' respective States.

21. Google admits it is a limited liability company organized and existing under the laws of the State of Delaware, and that it maintains a Mountain View, California business address; that it is a technology company that provides numerous internet-related products, including online advertising technologies; and that it is a subsidiary of XXVI Holdings Inc., which is a subsidiary of Alphabet Inc., a publicly traded company that is incorporated and existing under the laws of the State of Delaware and that maintains its principal executive offices in Mountain View, California. Google denies the allegations in Paragraph 21 in all other respects.

22. Paragraph 22 contains legal conclusions to which no response is required; to the extent a response is deemed necessary, Google does not dispute federal subject matter jurisdiction.

23. Google admits that Plaintiffs' Complaint seeks to assert various claims under federal and state laws, but denies that Plaintiffs' have adequately stated a claim under any of those laws and denies that Google has violated any of those laws. Google denies the allegations in Paragraph 23 in all other respects.

24. Paragraph 24 contains legal conclusions to which no response is required; to the extent a response is deemed necessary, Google denies the allegations in Paragraph 24.

25. Google does not dispute—for purposes of this action only—the personal jurisdiction of this Court and admits that it is engaged in interstate trade and commerce.

26. Google admits that venue is proper in the Eastern District of Texas for purposes of

this particular action under Section 12 of the Clayton Act, 15 U.S.C § 22 and 28 U.S.C. § 1391, but not that it is convenient or in the interests of justice under 28 U.S.C. § 1404(a). Google denies the allegations in Paragraph 26 in all other respects.

27. Google admits that the internet revolutionized the way people consume content and expanded the opportunities for companies to advertise. Google denies the allegations in Paragraph 27 in all other respects.

28. Google denies the allegations in Paragraph 28.

29. Google admits that online publishers sell their inventory to advertisers both directly and indirectly, including through advertising marketplaces; that “direct” sales are those in which a publisher sells its ad inventory directly to advertisers; and that such direct sales can include sales through the publisher's internal sales team and the publisher's private auctions. Google denies the allegations in Paragraph 29 in all other respects.

30. Google admits that online publishers sell their inventory to advertisers both directly and indirectly; that a publisher’s inventory is, in part, a function of the number of user visits to the relevant website; that a publisher may not always be able to predict the number of potential ad impressions it can sell directly; that indirect sales can occur through “ad exchanges” and through “networks” of publishers and advertisers; and that in addition to or as an alternative to direct sales, publishers can let ad exchanges auction their inventory in real-time and keep a portion of the proceeds in return. Google denies the allegations in Paragraph 30 in all other respects.

31. Google admits that online publishers can sell advertising either directly or indirectly. Google further admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 31 in all other respects.

32. Google admits that some publishers' inventory can be viewed as heterogeneous and that the value of different ad units can differ and will depend on a variety of factors including the audience. Google denies the allegations in Paragraph 32 in all other respects.

33. Google admits that publishers use a variety of products and services to help sell their display ad inventory, that advertisers use a variety of products and services to help purchase display ad inventory; and that ad servers, the marketplaces that match buyers and sellers, and ad buying tools are among the products that publishers use to help sell their display ad inventory and that advertisers use to purchase display inventory from, among other sources, ad exchanges. Google denies the allegations in Paragraph 33 in all other respects.

34. Google admits that ad servers can help track and sell a publisher's ad inventory through both direct and indirect channels to allow the publisher to attempt to maximize its revenue or achieve other goals and that some publishers use a single ad server. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the first sentence of Paragraph 34 and on that basis denies those allegations. Figure 1 purports to describe display ad space on an online publisher's website, to which no response is required; to the extent a response is deemed necessary, Google denies that Figure 1 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in Figure 1 in Paragraph 34. Google denies the allegations in Paragraph 34 in all other respects.

35. Google admits that publishers choose to use ad servers to advance their own interests. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 35 as to what "publishers ... rely on." Google denies the allegations in Paragraph 35 in all other respects.

36. Google admits that publisher ad servers perform a number of functions to enable



them to select appropriate advertising for each page impression; that ad servers may receive browser cookies and that, depending on a user's settings, such cookies may subsequently be correlated with a profile; that browser cookies can be used to cap the number of times a user is shown a particular ad to avoid oversaturating the user; that cookies can be used as part of the process of measuring ad campaigns' effectiveness; and that some ad campaign billing models, such as cost-per-conversion, charge advertisers based on a specified user action. Google denies the allegations in Paragraph 36 in all other respects.

37. Google admits that publishers can configure their indirect sales channels in their publisher ad server configurations; that publishers can route their inventory to multiple different exchanges and networks; and that publishers can configure how various exchanges and networks can access and compete for the publishers' inventory through their ad servers. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 37 and on that basis denies those allegations. Google denies the allegations in Paragraph 37 in all other respects.

38. Google admits that ad servers generally are responsible for selecting, in accordance with the publisher's preferences, the ads or ad providers for a particular page impression from among candidates identified through a publisher's direct and indirect sales channels. Google further admits that ad impressions have different values, with some higher value than others. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 38 and on that basis denies those allegations. Figure 2 purports to describe how a website's ad server manages and routes ad space, to which no response is required; to the extent a response is deemed necessary, Google denies that Figure 2 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the

allegations contained in Figure 2 in Paragraph 38. Google denies the allegations in Paragraph 38 in all other respects.

39. Google denies the allegations in Paragraph 39.

40. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the second sentence of Paragraph 40 and on that basis denies those allegations. Google denies the allegations in Paragraph 40 in all other respects.

41. Google admits that Google Ad Manager's ad server is the successor to an ad server product that Google acquired as part of its 2008 acquisition of DoubleClick. Google denies the allegations in Paragraph 41 in all other respects.

42. Google admits that many online publishers in the United States sell some of their inventory to advertisers indirectly through exchanges and networks. Google denies the allegations in Paragraph 42 in all other respects.

43. Google admits that ad exchanges match buyers and sellers of display ads on an impression-by-impression basis in real time, typically through an auction mechanism; that a publisher's ad server can route the publisher's inventory to ad exchanges in real time; that advertisers can connect with ad exchanges through advertising buying tools, among other means; and that many advertisers do not bid directly on ad exchanges. Figure 3 purports to describe how an exchange transacts with online publishers and advertisers through ad servers and buying tools, to which no response is required; to the extent a response is deemed necessary, Google denies that Figure 3 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in Figure 3 in Paragraph 43. Google denies the allegations in Paragraph 43 in all other respects.

44. Google denies the allegations in Paragraph 44.

45. Google admits it operates an ad exchange used by many advertisers and publishers, which previously was known as DoubleClick Ad Exchange or “AdX.” Google denies the allegations in Paragraph 45 in all other respects.

46. Google admits that it retains a percentage of the clearing price of transactions on its ad exchange that varies based on a number of factors including publisher and transaction type. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the first, fourth, and fifth sentences of Paragraph 46 and on that basis denies those allegations. Google denies the allegations in Paragraph 46 in all other respects.

47. Google denies the allegations in Paragraph 47.

48. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 48 in all other respects.

49. Google denies the allegations in Paragraph 49. Figure 4 purports to describe how an ad server routes to many exchanges, to which no response is required; to the extent a response is deemed necessary, Google denies that Figure 4 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in Figure 4 in Paragraph 49.

50. Google denies the allegations in the Paragraph 50.

51. Google admits that there are ad networks that primarily sell web display inventory and others that primarily sell in-app inventory; that it operates ad networks that primarily handle display inventory and networks that primarily handle in-app inventory; the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents; that its principal display advertising network is known as Google

Display Network (“GDN”); that its AdSense for Content typically retains a 32% revenue share (paying 68% to the publishers), which is higher than the revenue share typically retained by Google’s ad exchange; and that it operates AdMob, an ad network that sells in-app inventory on behalf of mobile app developers; that Facebook Audience Network (FAN) is one of Google’s major competitors; and that Google and Facebook compete in ways that include, but are not limited to, connecting third-party app publishers selling inventory to interested advertisers. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the ninth sentence of Paragraph 51 and on that basis denies those allegations. Google denies the allegations in Paragraph 51 in all other respects.

52. Google admits that many web and app publishers use Google’s ad exchange and ad networks. Figure 5 purports to describe how Google’s ad server controls routing functions to competing exchanges and networks, to which no response is required; to the extent a response is deemed necessary, Google denies that Figure 5 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in Figure 5 in Paragraph 52. Google denies the allegations in Paragraph 52 in all other aspects.

53. Google admits that publishers use publisher ad servers to facilitate their advertising sales and advertisers use tools to facilitate their advertising purchases; that advertisers of all sizes use demand-side platforms (“DSPs”); and the existence of a document containing portions of the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 53 in all other aspects.

54. Google admits that some ad buying tools let advertisers set parameters about their purchasing preferences, such as the types of users they wish to reach and the maximum bids they are willing to submit and pay for particular types of display inventory. Google further admits that

some ad buying tools use the advertiser's configurations to automatically bid on ad space in exchanges and networks. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth sentence of Paragraph 54 and on that basis denies those allegations. Google denies the allegations in Paragraph 54 in all other aspects.

55. Google admits that different buying tools have different features and requirements suitable to different users; that some advertisers outsource their ad purchasing to ad agencies; that buying tools charge different prices, in part due to differences in their features; and that Google Ads does not impose a minimum spending requirement on advertisers. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the sixth and seventh sentences of Paragraph 55 and on that basis denies those allegations. Figure 6 purports to describe how small advertisers can use the Google Ads buying tool to set their bids, to which no response is required; to the extent a response is deemed necessary, Google denies that Figure 6 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in Figure 5 in Paragraph 55. Google denies the allegations in Paragraph 55 in all other respects.

56. Google admits that when a user visits a publisher's website, an ad server may route the publisher's available impressions to exchanges along with information about the impression, including the user ID, the parameters of the ad slot, and any rules about pricing; that ad exchanges send "bid requests" to eligible bidders; that the bid requests sent by Google's ad exchange often include information about the impression and how long bidders have to respond with their bid response; that ad buying tools must evaluate the bid request, determine whether they want to bid on behalf of particular advertisers and, if so, how much, and return the bid response to the exchange before the timeout expires (which is often less than a second); that exchanges in general must, at

some point, close the auction and choose a winner from the bids received; that ad servers generally are responsible for selecting, in accordance with the publisher's preferences, the ads or ad providers for a particular page impression from among candidates identified through a publisher's direct and indirect sales channels; that users could see an ad adjacent to the content they are reading; and that real-time auctions happen every minute of every day for millions of Americans browsing the internet. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third and fifth sentences of Paragraph 56 and on that basis denies those allegations. Figure 7 purports to describe how an exchange solicits bids from advertisers' buying tools, to which no response is required; to the extent a response is deemed necessary, Google denies that Figure 7 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in Figure 5 in Paragraph 56. Google denies the allegations in Paragraph 56 in all other respects.

57. Google denies the allegations in Paragraph 57.

58. Google admits that it offers ad buying tools that are suitable for advertisers of all sizes; that it offers an ad buying tool known as Display & Video 360 ("DV360") that is used by advertisers of all sizes, and which is derived in part from Google's acquisition of Invite Media; that advertisers of all sizes may purchase advertisements through Google Ads; and that advertisers pay fees for the different services Google offers, and these fees may be subject to negotiation and therefore may vary among customers. Google denies the allegations in Paragraph 58 in all other respects.

59. Google admits the existence of a document containing portions of the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 59 in all other respects.

60. Google admits that many of the bids submitted by Google Ads and DV360 are algorithmically determined, based on the advertiser's preferences and constraints; that it describes its services' operations and policies to its customers; and the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 60 in all other respects.

61. Google admits that publisher ad servers can help publishers manage their online display advertising inventory, including but not limited to image-based graphical ads alongside web content and that many publisher ad servers provide, to varying degrees and in varying ways, the listed features. Google denies the allegations in Paragraph 61 in all other respects.

62. Google admits that many publishers use one ad server at a time to manage their web display inventory and that a publisher may, for a variety of reasons, use more than one ad server. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the first sentence of Paragraph 62 and on that basis denies those allegations. Google denies the allegations in Paragraph 62 in all other respects.

63. Google denies the allegations in Paragraph 63.

64. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 64 in all other respects.

65. Google admits that large publishers such as those listed use publisher ad servers. Google denies the allegations in Paragraph 65 in all other respects.

66. Google denies the allegations in Paragraph 66.

67. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third and fourth sentences of Paragraph 67 and on that basis denies those

allegations. Google denies the allegations in Paragraph 67 in all other respects.

68. Google admits that ad servers have entered and exited since 2012. Google denies the allegations in Paragraph 68 in all other respects.

69. Google admits that ad servers can charge fees for their services and that some header bidding implementations may not have an associated fee. Google denies the allegations in Paragraph 69 in all other respects.

70. Google admits, on information and belief, the existence of an industry publication containing portions of the quoted language, to which publication Google refers the Court for a complete and accurate statement of its contents. Google further admits that there may be some costs or inconveniences in replacing one publisher ad server with another for the same webpage. Google denies the allegations in Paragraph 70 in all other respects.

71. Google admits that ad exchanges auction multiple publishers' display inventory to multiple end-advertisers, including through intermediaries such as demand-side platforms or trading desks, on an impression-by-impression basis and in real time; that exchanges generally interoperate with or are integrated with publishers' ad servers, including but not limited to Google Ad Manager; and that advertisers typically interact with ad exchanges through ad networks, buying tools, or other intermediaries. Google denies the allegations in Paragraph 71 in all other respects.

72. Google admits that exchanges and networks may each set different requirements for participation and that different publishers use exchanges and networks in different proportions. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the sixth sentence of Paragraph 72 and on that basis denies those allegations. Google denies the allegations in Paragraph 72 in all other respects.

73. Google admits that buying or selling inventory directly may involve a sales team



or automated sales interface; that publishers and advertisers may (but need not) rely on internal staff to manage their relationships; and that the expected value of inventory can be a factor publishers consider in determining an ad sales strategy. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the sixth and seventh sentences of Paragraph 73 and on that basis denies those allegations. Google denies the allegations in Paragraph 73 in all other respects.

74. Google denies the allegations in Paragraph 74.

75. Google admits that Google's ad exchange has facilitated many transactions among advertisers and publishers since 2013. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the second, third, and sixth sentences of Paragraph 75 and on that basis denies those allegations. Google denies the allegations in Paragraph 75 in all other respects.

76. Google admits that Rubicon (now, Magnite), AppNexus (now, AT&T's Xandr), and Index Exchange, among many others, all operate ad exchanges with which Google competes. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the first and second sentences of Paragraph 76 and on that basis denies those allegations. Google denies the allegations in Paragraph 76 in all other respects.

77. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth and fifth sentences of Paragraph 77 and on that basis denies those allegations. Google denies the allegations in Paragraph 77 in all other respects.

78. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google further admits that its revenue share varies across transaction types and customers. Google

denies the allegations in Paragraph 78 in all other respects.

79. Google admits that Google's revenue share varies across transaction types and customers, and that there may be some customers for whom it did not decline in 2017. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 79 and on that basis denies those allegations. Google denies the allegations in Paragraph 79 in all other respects.

80. Google admits that generally speaking an ad exchange is more attractive to advertisers as more publishers use it, and more attractive to publishers as more advertisers use it. Google denies the allegations in Paragraph 80 in all other respects.

81. Google admits that ad networks match ad inventory for publishers of different sizes with advertisers; that networks provide varying degrees of price transparency on a per-impression basis; and that networks can carry inventory risk by purchasing impressions on their own behalf as opposed to on the direct behalf of a specific advertiser or advertiser representative. Google denies the allegations in Paragraph 81 in all other respects.

82. Google admits that networks and exchanges can offer varying degrees of price transparency on a per-impression basis; that many publishers of varying sizes sell inventory through ad networks; that networks can have varying requirements for participation; that AdSense publishers on the Google Display Network do not have monthly page view or impression requirements; and that many publishers, including local newspapers, niche networks, blogs, and others, sell ad inventory via ad networks. Google denies the allegations in Paragraph 82 in all other respects.

83. Google denies the allegations in Paragraph 83.

84. Google admits the existence of a document containing substantially the quoted

language, to which document Google refers the Court for a complete and accurate statement of its contents. Google further admits that many publishers, large and small, use Google's ad networks. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 84, and on that basis denies those allegations. Google denies the allegations in Paragraph 84 in all other respects.

85. Google admits that publishers receive 68% of the gross revenue from sales made via the ad network AdSense for Content. Google further admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 85 in all other respects.

86. Google denies the allegations in Paragraph 86.

87. Google admits that advertisers of all types and sizes use automated tools to bid on and purchase ad inventory, including ad inventory trading on ad exchanges and ad networks. Google denies the allegations in Paragraph 87 in all other respects.

88. Google denies the allegations in Paragraph 88.

89. Google admits that different ad exchanges and ad networks provide different types of interfaces for advertisers, including for the purchase of inventory. Google denies the allegations in Paragraph 89 in all other respects.

90. Google denies the allegations in Paragraph 90

91. Google admits that advertisers of all types and sizes use automated tools to bid on and purchase ad inventory, including inventory trading on ad exchanges and ad networks; and that advertisers use buying tools to achieve their advertising goals. Google denies the allegations in Paragraph 91 in all other respects.

92. Google denies the allegations in Paragraph 92.

93. Google denies the allegations in Paragraph 93.

94. Google admits that advertisers of all types and sizes use automated tools to bid on and purchase ad inventory, including inventory trading on ad exchanges and ad networks and that advertisers using Google Ads purchase a significant percentage of the impressions in Google's Ad Exchange and on AdSense for Content, which percentage varies from month to month and year to year. Google denies the allegations in Paragraph 94 in all other respects.

95. Google admits that it retains a percentage of the clearing price of transactions on its ad exchange that varies based on a number of factors including publisher and transaction type. Google denies the allegations in Paragraph 95 in all other respects.

96. Google denies the allegations in Paragraph 96.

97. Google admits that buying tools provide varying types of measurement functionality to assess audience reach. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth sentence of Paragraph 97 and on that basis denies those allegations. Google denies the allegations in Paragraph 97 in all other respects.

98. Google denies the allegations in Paragraph 98.

99. Google admits that ad exchanges were in use prior to 2009 and that both prior to and after its acquisition of DoubleClick, it has faced continual competition from multiple well-funded rivals. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth and fifth sentences of Paragraph 99 and on that basis denies those allegations. Google denies the allegations in Paragraph 99 in all other respects.

100. Google admits that in 2009, many advertisers used AdWords to bid on display ad space. Google denies the allegations in Paragraph 100 in all other respects.

101. Google admits that the service previously known as AdWords is now known as Google Ads. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the third, fourth, and fifth sentences of Paragraph 101 and on that basis denies those allegations. Google denies the allegations in Paragraph 101 in all other respects.

102. Google admits that advertisers can purchase Google Search ads on Google Ads. Google denies the allegations in Paragraph 102 in all other respects.

103. Figure 8 purports to describe Google's ad buying tool for small advertisers, to which no response is required; to the extent a response is deemed necessary, Google denies that Figure 8 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in Figure 8 in Paragraph 103. Google denies the allegations in Paragraph 103 in all other respects.

104. Google admits that Google Ads bids on Google's ad exchange on behalf of advertisers; that Google Ads bids on Google's ad exchange; and the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 104 in all other respects.

105. Google denies the allegations in Paragraph 105.

106. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 106 in all other respects.

107. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 107. Google denies the allegations in Paragraph 107 in all other respects.

108. Google admits the existence of a Wall Street Journal article containing the quoted language, to which article Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 108 in all other respects.

109. Google admits that from 2008 to the present, Google's ad exchange and ad server products have faced significant competition. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the fifth sentence of Paragraph 109. Google denies the allegations in Paragraph 109 in all other respects.

110. Google admits that beginning in approximately 2016, Google Ads began bidding on display ad inventory on non-Google ad exchanges on behalf of advertisers. Google denies the allegations in Paragraph 110 in all other respects.

111. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 111 in all other respects.

112. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 112 in all other respects.

113. Google admits that competition among advertisers, publishers, and advertising sales channels, including but not limited to ad exchanges, all can promote price and other types of competition and that there is an industry practice known as "waterfalling" that involves sequentially offering inventory to multiple exchanges, networks, or other sources of demand. Google denies the allegations in Paragraph 113 in all other respects.

114. Google denies the allegations in Paragraph 114.

115. Google admits that it is possible that one ad exchange receives higher bids for an

ad impression than another ad exchange. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the first sentence of Paragraph 115 and on that basis denies those allegations. Google denies the allegations in Paragraph 115 in all other respects.

116. Google admits that ad exchanges compete with a variety of advertising sales channels and sources of ad inventory on a variety of factors. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the first and second sentences of Paragraph 116, insofar as they relate to the financial sector, and the third and fourth sentences, insofar as they related to security exchanges, and on that basis denies those allegations. Google denies the allegations in Paragraph 116 in all other respects.

117. Google denies the allegations in Paragraph 117.

118. Google admits that its publisher ad server, originally known as DoubleClick for Publishers, included a feature known as “dynamic allocation” that was designed to compare real-time bids received through Google’s ad exchange with a publisher’s estimate of its yield from other channels, so as to maximize the publisher’s revenue. Google denies the allegations in Paragraph 118 in all other respects.

119. Google admits that prior to Google’s acquisition of DoubleClick and subsequently, DFP (and now Google Ad Manager) selected ads or ad providers based on a number of factors, including the publisher’s configured preferences and the feature that became known as dynamic allocation. Google denies the allegations in Paragraph 119 in all other respects.

120. Google admits that while dynamic allocation only supported the DoubleClick ad exchange (both before and after Google acquired DoubleClick), publishers could configure an estimated or contracted CPM for any other non-guaranteed demand source, including exchanges or networks; and that many publishers use and used an exchange’s historical performance when

determining the expected value to configure for that exchange for a particular ad impression. Google denies the allegations in Paragraph 120 in all other respects.

121. Google denies the allegations in Paragraph 121.

122. Google admits the existence of a document containing portions of the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 122 in all other respects.

123. Google admits on information and belief that publishers choose ad servers based on their ability to, among other factors, maximize publishers' advertising revenue; and that it described a goal of dynamic allocation as being to help publishers maximize their advertising revenue. Google denies the allegations in Paragraph 123 in all other respects.

124. Google admits the existence of an industry publication containing the quoted language, to which publication Google refers the Court for a complete and accurate statement of its contents. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the third and fourth sentences of Paragraph 124. Google denies the allegations in Paragraph 124 in all other respects.

125. Google admits Google's ad server manages publishers' heterogenous inventory and maximizes inventory yield; and that it encrypts cookie identifiers before sharing with third party buyers on its ad exchange to ensure user privacy, while still allowing authorized recipients to associate an encrypted identifier's previous activity with the current request. Google denies the allegations in Paragraph 125 in all other respects.

126. Google admits that cookies (including hashed or encrypted cookie identifiers) help publishers with measurement, reaching users, and frequency capping, and that impressions without associated cookies or alternative means of understanding what may be relevant to users can have



lower value when sold on an exchange (which one study estimated could be approximately 50% less). Google denies the allegations in Paragraph 126 in all other respects.

127. Google admits that it hashes or encrypts the cookie identifiers it shares with third parties in connection with publishers' impressions, such that such identifiers are unique to a given third party; and that the encrypted cookie identifiers shared with publishers and advertisers differ. Google denies the allegations in Paragraph 127 in all other respects.

128. Google denies the allegations in Paragraph 128.

129. Google denies the allegations in Paragraph 129.

130. Google denies the allegations in Paragraph 130.

131. Google denies the allegations in Paragraph 131.

132. Google admits that Reserve Price Optimization ("RPO") [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Google denies the allegations in Paragraph 132 in all other respects.

133. Google admits that its ad exchange supports a feature called [REDACTED]

[REDACTED] and that, if enabled by the publisher, [REDACTED]

[REDACTED]

[REDACTED]. Google denies the allegations in Paragraph 133 in all other respects.

134. Google admits that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Google further admits that [REDACTED] is intended to increase advertisers' win rates in Google's ad exchange and that, like other aspects of buying tools' (both

Google's and rivals') determination of bids for particular impressions, the details of [REDACTED] [REDACTED] operations are not disclosed to publishers, although publishers do have transparency into the final bids submitted by Google Ads and other buying tools/DSPs. Google denies the allegations in Paragraph 134 in all other respects.

135. Google denies the allegations in Paragraph 135.

136. Google admits that advertisers buying through networks, demand-side platforms, or other buying tools participating on Google's ad exchange win auctions when they have the highest net bid (including a net bid higher than those of advertisers using Google's buying tools); that the Bernanke program has increased Google Ads' win rate within Google's ad exchange; Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents; that, according to at least one Google study, the Bernanke program was expected to increase Google's revenue by approximately \$230 million in the given year; and that the figure in Paragraph 136 contains a screenshot of the cover page of a 2013 internal Google presentation on Project Bernanke. Google denies the allegations in Paragraph 136 in all other respects.

137. Google denies the allegations in Paragraph 137.

138. Google admits that it uses a variety of programs to improve the auction performance of its various products and services for the benefit of advertisers and publishers; that those programs consequently increase Google's revenue; and that the figures alleged in Paragraph 138 reflect the approximate increase in Google's revenue from certain of those programs. Google denies the allegations in Paragraph 138 in all other respects.

139. Google admits the existence of documents containing the quoted language, to which documents Google refers the Court for a complete and accurate account of their contents.

Google further admits its use of confidential, non-public publisher data is and was subject to the restrictions in its contracts with the respective publishers. Google denies the allegations in Paragraph 139 in all other respects.

140. Google denies the allegations in Paragraph 140.

141. Google admits that it entered into an agreement to allow WhatsApp users to backup their WhatsApp data to Google Drive. Google further admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 141 in all other respects.

142. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations Paragraph 142 in all other respects.

143. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations Paragraph 143 in all other respects.

144. Google admits that its Google Ad Manager implements a feature originally known as Enhanced Dynamic Allocation (“EDA”); that many publishers have historically sold many of their most valuable impressions directly to advertisers; and that EDA permits non-guaranteed demand in Google Ad Manager (including both demand from Google’s ad exchange and third-party exchanges) to compete simultaneously with guaranteed line items in Google Ad Manager when the revenue to be derived from the non-guaranteed option was higher than the opportunity cost of not serving the guaranteed line item (without risking the fulfillment of the guarantee). Google denies the allegations in Paragraph 144 in all other respects.

145. Google admits that when a directly-sold guaranteed line item is configured in its Google Ad Manager ad server, the Google Ad Manager ad server uses its best efforts to allocate impressions to that advertiser so as to meet the criteria specified by the publisher. Google further admits that, prior to the implementation of EDA, when such a guaranteed line item was eligible for an impression, the ad server did not consider alternative, non-guaranteed line items or bids, even if they might have had a higher price; and that when EDA applies to an impression, Google's ad server now considers whether selling a given impression on a non-guaranteed basis is likely to increase the publisher's overall revenue, even if a guaranteed line item would also be eligible to fill the impression, if it can do so without risking the fulfilment of the guarantee. Google denies the allegations in Paragraph 145 in all other respects.

146. Google denies the allegations in Paragraph 146.

147. Google denies the allegations in Paragraph 147.

148. Google admits that EDA causes a non-guaranteed line item to win an impression only when the highest bid is greater than the floor price. Google denies the allegations in Paragraph 148 in all other respects.

149. Google denies the allegations in Paragraph 149.

150. Google admits the existence of documents containing the quoted language, to which documents Google refers the Court for a complete and accurate statement of their contents. Google denies the allegations in Paragraph 150 in all other respects.

151. Google denies the allegations in Paragraph 151.

152. Google admits that it retains a percentage of the clearing price of transactions on its ad exchange that varies based on a number of factors including publisher and transaction type. Google denies the allegations in Paragraph 152 in all other respects.

153. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the first and second sentences of Paragraph 153 and on that basis denies those allegations. Google denies the allegations in Paragraph 153 in all other respects.

154. Google admits that publishers can implement header bidding by inserting code into the HTML header of their webpages and that header bidding can enable bid requests to multiple exchanges and other demand sources. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth sentence of Paragraph 154 and on that basis denies those allegations. Google denies the allegations in Paragraph 154 in all other respects.

155. Google admits that publishers route their inventory through multiple exchanges. Google denies the allegations in Paragraph 155 in all other respects.

156. Google admits that there has been an evolution of technologies seeking to maximize publishers' yield, including waterfalling, dynamic allocation, and enhanced dynamic allocation. Google further admits the existence of documents containing the quoted language, to which documents Google refers the Court for a complete and accurate statement of their contents. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the first and fifth sentences of Paragraph 156. Google denies the allegations in Paragraph 156 in all other respects.

157. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 157 in all other respects.

158. Google admits that consumers benefit from goods and services that are lower priced

and of better quality. Google denies the allegations in Paragraph 158 in all other respects.

159. Google denies the allegations in Paragraph 159.

160. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 160 in all other respects.

161. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 161 in all other respects.

162. Google admits it competes directly with Amazon and Facebook. Google denies the allegations in Paragraph 162 in all other respects.

163. Google denies the allegations in Paragraph 163.

164. Google admits that Exchange Bidding was later renamed Open Bidding; that Exchange Bidding was codenamed [REDACTED]; that it designed Exchange Bidding to solve many of the problems associated with header bidding; and that it evaluated the success of the program by, among other things, [REDACTED]  
[REDACTED] Google denies the allegations in Paragraph 164 in all other respects.

165. Google admits that, in an effort to better protect user privacy, Open Bidding provides exchanges with less direct access to user information than they can obtain through header bidding. Google denies the allegations in Paragraph 165 in all other respects.

166. Google admits that it retains a revenue share of 5-10% for transactions matched through Open Bidding as consideration for the value provided by Google's service. Google further admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations

in Paragraph 166 in all other respects.

167. Google denies the allegations in Paragraph 167.

168. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. The image at the end of paragraph 168 contains a partial screenshot of a document, to which no response is required; to the extent a response is deemed necessary, Google denies that the image presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in that image. Google denies the allegations in Paragraph 168 in all other respects.

169. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 169 in all other respects.

170. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 170 in all other respects.

171. Google denies the allegations in Paragraph 171.

172. Google admits that in March 2017, Facebook published a blog post indicating that mobile web publishers who use header bidding would be able to join its Facebook Audience Network through approved partners or through open-source header bidding solutions; that one of the ways that ad networks can transact with publishers using Google's Ad Manager or AdMob platforms is to submit bids into ad exchanges; and that its contracts with many publishers set a revenue share in the alleged range for certain transaction types on its Google Ad Manager ad exchange. Google lacks knowledge or information sufficient to form a belief as to the truth of the

allegations in the second sentence of Paragraph 172 and on that basis denies those allegations. Google lacks knowledge sufficient to form a belief as to the truth or falsity of the allegations in the fifth sentence of Paragraph 172, and on that basis, denies those allegations. Google denies the allegations in Paragraph 172 in all other respects.

173. Google denies the allegations in Paragraph 173.

174. Google admits the existence of articles containing the quoted language, to which articles Google refers the Court for a complete and accurate statement of their contents. Google lacks knowledge sufficient to form a belief as to the truth of the allegations in the first sentence of Paragraph 174, and on that basis, denies those allegations. Google denies the allegations in Paragraph 174 in all other respects.

175. Google admits that [REDACTED]

[REDACTED]  
[REDACTED] Google lacks knowledge sufficient to form a belief as to the truth of the allegations in the second sentence of Paragraph 175 and, on that basis, denies those allegations. Google denies the allegations in Paragraph 175 in all other respects.

176. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 176 in all other respects.

177. Google lacks knowledge sufficient to form a belief as to the truth of the allegations in Paragraph 177, and on that basis, denies those allegations.

178. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the first, third, and fourth sentences of Paragraph 178 and on that basis denies




those allegations. Google denies the allegations in Paragraph 178 in all other respects.

179. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents, and the existence of documents containing references to a potential collaboration with Facebook. Google denies the allegations in Paragraph 179 in all other respects.

180. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 180 and on that basis denies those allegations. Google denies the allegations in Paragraph 180 in all other respects.

181. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 181 in all other respects.

182. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 13 and on that basis denies those allegations. Google denies the allegations in Paragraph 182 in all other respects.

183. Google admits the existence of a September 2018 Google-Facebook agreement. The image following Paragraph 183 appears to be a , to which no response is required; to the extent a response is deemed necessary, Google denies that image at the end of Paragraph 183 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in the image at the end of Paragraph 183. Google denies the allegations in Paragraph 183 in all other respects.

184. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the first and second sentences of Paragraph 184 and on that basis denies those allegations. Google denies the allegations in Paragraph 184 in all other respects.

185. Google admits that one way for ad networks to transact with publishers using Google's ad server is through ad exchanges participating in Google's Open Bidding program; that [REDACTED]; that Google charges Facebook a [REDACTED] to participate in Google's Open Bidding program, [REDACTED]; and that [REDACTED]. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fifth and sixth sentences of Paragraph 185 and on that basis denies those allegations. Google denies the allegations in Paragraph 185 in all other respects.

186. Google admits that some bidders in its auctions have requested that timeouts in Google's auctions be lengthened, while others have requested that they be shortened. Google further admits that it ultimately opted [REDACTED]. Google denies the allegations in Paragraph 186 in all other respects.

187. Google admits that Facebook [REDACTED] and that it has [REDACTED] ad networks and ad exchanges participating in its Open Bidding program. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third and fourth sentences of Paragraph 187 and on that basis denies those allegations. Google denies the allegations in Paragraph 187 in all other respects.

188. Google admits that it does not charge any buyer, including Facebook Audience Network, for impressions we believe to be resulting from spam. Google denies the allegations in Paragraph 188 in all other respects.

189. Google admits that the [REDACTED]  
[REDACTED]  
[REDACTED]; that the [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]; and that the [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth sentence of Paragraph 189 and on that basis denies those allegations. Google denies the allegations in Paragraph 189 in all other respects.

190. Google admits that it has worked with Facebook, among other partners, to improve their respective performance in Google's auctions. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fifth and six sentences of Paragraph 190 and on that basis denies those allegations. Google denies the allegations in Paragraph 190 in all other respects.

191. Google admits that the [REDACTED]  
[REDACTED] and is consistent with Google's existing practice regarding all bidders' data. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the

first, second, and third sentences of Paragraph 191 and on that basis denies those allegations. The image at the end of Paragraph 191 purports to describe a Google contract, to which no response is required; to the extent a response is deemed necessary, Google denies that the image at the end of Paragraph 191 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in the image at the end of Paragraph 191. Google denies the allegations in Paragraph 191 in all other respects.

192. Google admits that the [REDACTED]  
[REDACTED]  
[REDACTED] and that the [REDACTED]  
[REDACTED]  
[REDACTED]. Google denies the allegations in Paragraph 192 in all other respects.

193. Google admits that Google and Facebook compete head-to-head in the sale of online advertising in a variety of ways, including in publishers' advertising auctions and to serve large and small advertisers and that its employees discuss competing against Facebook. Google denies the allegations in Paragraph 193 in all other respects.

194. Google admits that the [REDACTED]  
[REDACTED]  
[REDACTED]. Google denies the allegations in Paragraph 194 in all other respects.

195. Google admits that its [REDACTED]  
[REDACTED]. Google further admits that the existence of a document containing the quoted language, to which document Google refers the Court for a complete and

accurate statement of its contents. Google denies the allegations in Paragraph 195 in all other respects.

196. Google admits that the [REDACTED]

[REDACTED] and that the [REDACTED]

The screenshot at the end of Paragraph 196 purport to describe a Google contract, to which no response is required; to the extent a response is deemed necessary, Google denies that image at the end of Paragraph 196 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in the image at the end of Paragraph 196. Google denies the allegations in Paragraph 195 in all other respects.

197. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 197 in all other respects.

198. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the second sentence of Paragraph 198 and on that basis denies those allegations. Google denies the allegations in Paragraph 198 in all other respects.

199. Google denies the allegations in Paragraph 199.

200. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 200, and on that basis denies those allegations. Google denies the allegations in Paragraph 200 in all other respects.

201. Google admits that Google's advertiser-facing tools, like competitive buying tools, use historical data to attempt to model the optimal bids for impressions to improve win rates for

advertisers. Google denies the allegations in Paragraph 201 in all other respects.

202. Google denies the allegations in Paragraph 202.

203. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the second sentence of Paragraph 203 and on that basis denies those allegations. The image at the end of Paragraph 203 purports to be a portion of a Google document, to which no response is required; to the extent a response is deemed necessary, Google denies that image at the end of Paragraph 203 presents a fair, accurate, and complete description of the matters described therein and, on that basis, denies the allegations contained in the image at the end of Paragraph 203. Google denies the allegations in Paragraph 203 in all other respects.

204. Google denies the allegations in Paragraph 204.

205. Google admits that since well before header bidding became popular, Google's ad server has limited the total number of line items that a publisher can create to ensure the efficient operation of the ad server; that it has received requests from time to time from publishers to increase the number of permitted line items to enable them to better implement their preferred header bidding scheme, and [REDACTED] Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the sixth sentence of Paragraph 205. Google denies the allegations in Paragraph 205 in all other respects.

206. Google admits that header bidding is typically implemented through the insertion of JavaScript code in the header section of the webpages and that Google helped create AMP and

initially restricted publishers from including arbitrary Javascript on AMP-compliant pages. Google denies the allegations in Paragraph 206 in all other respects.

207. Google admits that it registered and continues to own ampproject.org; that the lead project developer and decision maker was a Google employee through 2018; and that control of the project has transitioned to the OpenJS Foundation. Google denies the allegations in Paragraph 206 in all other respects.

208. Google admits that, as a consequence of AMP's initial speed-related restrictions on the inclusion of arbitrary Javascript code, AMP was initially incompatible with header bidding; that, to ensure fast loading of AMP pages, such pages are automatically cached in any number of third-party caches; and that Google's search results pages automatically fetch AMP-compliant pages from Google's AMP cache to optimize load time, but other search engines or platforms can use non-Google caches if they desire. Google denies the allegations in Paragraph 208 in all other respects.

209. Google denies the allegations in Paragraph 209.

210. Google admits that just as publishers have the freedom to make their webpages mobile or desktop compatible, publishers still have the freedom to decide whether to build their pages using the AMP framework and that, to ensure, for example, the availability of certain functionality (such as swiping from article to article), only AMP-compliant articles are currently eligible for inclusion in the Top Stories carousel on Google's search result page (a requirement that Google has publicly stated it will drop in May 2021). The image at the end of Paragraph 210 purports to be a screenshot of Google search results to which no response is required; to the extent a response is deemed necessary, Google denies the allegations contained in the image at the end of Paragraph 210 presents a fair, accurate, and complete description of the matters described

therein and, on that basis, denies the allegations contained in the image at the end of Paragraph 210. Google denies the allegations in Paragraph 210 in all other respects.

211. Google lacks knowledge and information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 211. Google denies the allegations in Paragraph 211 in all other respects.

212. Google admits the existence of documents containing the quoted language, to which documents Google refers the Court for a complete and accurate statement of their contents. Google denies the allegations in Paragraph 212 in all other respects.

213. Google denies the allegations in Paragraph 213.

214. Google denies the allegations in Paragraph 214.

215. Google admits that [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]. Google denies the allegations in Paragraph 215 in

all other respects.

216. Google admits that it made certain statements to Congress and the FTC with respect to its use of data derived from DoubleClick for Publishers. Google denies the allegations in Paragraph 216 in all other respects.

217. Google admits that “minimum bid to win” data relates to the price an auction participant would have had to bid to win a particular auction. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 217 and on that basis denies those allegations. Google denies the allegations in Paragraph 217 in all other respects.



218. Google admits the existence of a document containing portions of the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 218 in all other respects.

219. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 219 in all other respects.

220. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 220, and on that basis denies those allegations.

221. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 221 in all other respects.

222. Google denies the allegations in Paragraph 222.

223. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 223 in all other respects.

224. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google further admits that Google once considered, but rejected, the product proposed, which would have in any event been optional for publishers. Google denies the allegations in Paragraph 224 in all other respects.

225. Google admits the existence of documents containing portions of the quoted language, to which documents Google refers the Court for a complete and accurate statement of their contents. Google further admits that it once considered, but rejected, the product proposed,

which would have in any event been optional for publishers. Google denies the allegations in Paragraph 225 in all other respects.

226. Google denies the allegations in Paragraph 226.

227. Google denies the allegation in Paragraph 227.

228. Google denies the allegations in Paragraph 228.

229. Google admits the existence of documents containing portions of the quoted language, to which documents Google refers the Court for a complete and accurate statement of their contents. Google denies the allegations in Paragraph 229 in all other respects.

230. Google admits that, as a result of a simplification of Google Ad Manager's pricing rules functionality released in 2019, publishers are able to configure different floor prices for various advertisers, brands, ad formats, or ad slots, but that any such rules apply uniformly to all demand sources participating in Ad Manager's unified auction, including ad exchanges, networks, DSPs, or other buying tools. Google further admits that, as a result of the unified pricing rules, publishers can no longer set different floors for different buyers in Google Ad Manager's unified auction, including exchanges participating via Open Bidding, when bidding on the same inventory on behalf of the same advertiser; that a publisher can no longer use Google Ad Manager to set different price floors for two bidders in the same auction (e.g. Google Ads and The Trade Desk) if they are bidding on behalf of the same advertiser and that it refers to the 2019 revision of Google Ad Manager's pricing rules system as Unified Pricing Rules. Google denies the allegations in Paragraph 230 in all other respects.

231. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the second sentence of Paragraph 231 and on that basis denies those allegations. Google denies the allegations in Paragraph 231 in all other respects.

232. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 232 and on that basis denies those allegations. Google denies the allegations in Paragraph 232 in all other respects.

233. Google denies the allegations in Paragraph 233.

234. Google admits the existence of a document reflecting a discussion between Google and Facebook regarding [REDACTED]

[REDACTED]. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 234 in all other respects.

235. Google denies the allegations in Paragraph 235.

236. Google admits that, before its introduction of Unified Pricing Rules, publishers could set different price floors for different buyers. Google denies the allegations in Paragraph 236 in all other respects.

237. Google denies the allegations in Paragraph 237.

238. Google denies the allegations in Paragraph 238.

239. Google admits that online instream ads occur within the video stream of a video that the user is already watching (e.g., a video ad before, during, or after a YouTube video) while outstream ads are ads that occur when the end-user is scrolling through other content (e.g., a video ad that automatically plays when scrolling through an article) and that advertisers can use various advertising formats to achieve their campaign goals. Google denies the allegations in Paragraph 239 in all other respects.

240. Google admits the existence of documents containing the quoted language, to which documents Google refers the Court for a complete and accurate statement of their contents.

Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the second, third, fourth, and fifth sentences of Paragraph 240 and on that basis denies those allegations. Google denies the allegations in Paragraph 240 in all other respects.

241. Google denies the allegations in Paragraph 241.

242. Google denies the allegations in Paragraph 242.

243. Google admits that prior to 2016, a small percentage of the sales of certain types of YouTube advertising space occurred on Google's ad exchange, such that third-party demand side platforms or advertising networks were able to bid to buy those types of YouTube advertising space at that time. Google denies the allegations in Paragraph 243 in all other respects.

244. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 244 in all other respects.

245. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 245 in all other respects.

246. Google denies the allegations in Paragraph 246.

247. Google denies the allegations in Paragraph 247.

248. Google admits that the risk of self-competition (instances in which an advertiser bids against itself) increases when the same advertiser bids on the same inventory through multiple channels, and that such self-competition is generally inefficient, but otherwise denies the allegation. Google denies the allegations in Paragraph 248 in all other respects.

249. Google denies the allegations in Paragraph 249.

250. Google denies the allegations in Paragraph 250.

251. Google denies the allegations in Paragraph 251.

252. Google denies the allegations in Paragraph 252.

253. Google denies the allegations in Paragraph 253.

254. Google admits that Yahoo!, AppNexus, and OpenX operate or operated publisher ad server solutions, and that AppNexus was acquired by AT&T. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth, fifth, and sixth sentences of Paragraph 254 and on that basis denies those allegations. Google denies the allegations in Paragraph 254 in all other respects.

255. Google denies the allegations in Paragraph 255.

256. Google denies the allegations in Paragraph 256.

257. Google denies the allegations in Paragraph 257.

258. Google denies the allegations in Paragraph 258.

259. Google denies the allegations in Paragraph 259.

260. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third, fourth, and fifth sentences of Paragraph 260 and on that basis denies those allegations. Google denies the allegations in Paragraph 260 in all other respects.

261. Google admits that rivals can and have developed auction features similar to the features of Google's advertising auctions. Google denies the allegations in Paragraph 261 in all other respects.

262. Google admits that, prior to 2016, a small percentage of the sales of certain types of YouTube advertising space occurred on Google's ad exchange, such that third-party demand side platforms or advertising networks were able to bid to buy those types of YouTube advertising space at that time. Google lacks knowledge or information sufficient to form a belief as to the truth

of the allegations in the second sentence of Paragraph 262 and on that basis denies those allegations. Google denies the allegations in Paragraph 262 in all other respects.

263. Google denies the allegations in Paragraph 263.

264. Google admits the existence of a document containing the quoted language, to which document Google refers the Court for a complete and accurate statement of its contents. Google denies the allegations in Paragraph 264 in all other respects.

265. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the third sentence of Paragraph 265 and on that basis denies those allegations. Google denies the allegations in Paragraph 265 in all other respects.

266. Google denies the allegations in Paragraph 266.

267. Google denies the allegations in Paragraph 267

268. Google denies the allegations in Paragraph 268.

269. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the first, second, third, and fourth sentences of Paragraph 269 and on that basis denies those allegations. Google denies the allegations in Paragraph 269 in all other respects.

270. Google admits that advertising can promote competition in some sectors. Google lacks knowledge or information sufficient to form a belief as to the truth of the allegations in the fourth sentence of Paragraph 270 and on that basis denies those allegations. Google denies the allegations in Paragraph 270 in all other respects.

271. Google restates its response to every allegation set forth above as if stated herein.

272. Google denies the allegations in Paragraph 272.

273. Google denies the allegations in Paragraph 273.

274. Google denies the allegations in Paragraph 274.

- 275. Google denies the allegations in Paragraph 275.
- 276. Google denies the allegations in Paragraph 276.
- 277. Google denies the allegations in Paragraph 277.
- 278. Google denies the allegations in Paragraph 278.
- 279. Google restates its response to every allegation set forth above as if stated herein.
- 280. Google denies the allegations in Paragraph 280.
- 281. Google denies the allegations in Paragraph 281.
- 282. Google denies the allegations in Paragraph 282.
- 283. Google denies the allegations in Paragraph 283.
- 284. Google denies the allegations in Paragraph 284.
- 285. Google denies the allegations in Paragraph 285.
- 286. Google denies the allegations in Paragraph 286.
- 287. Google denies the allegations in Paragraph 287.
- 288. Google restates its response to every allegation set forth above as if stated herein.
- 289. Google denies the allegation in Paragraph 289.
- 290. Paragraph 290 contains legal conclusions to which no response is required and, on that basis, Google denies the allegations in Paragraph 290.
- 291. Google denies the allegations in Paragraph 291.
- 292. Google denies the allegations in Paragraph 292.
- 293. Google denies the allegations in Paragraph 293.
- 294. Google denies the allegation in Paragraph 294.
- 295. Paragraph 295 contains legal conclusions to which no response is required and, on that basis, Google denies the allegations in Paragraph 295.

296. Google denies the allegations in Paragraph 296.

297. Google denies the allegations in Paragraph 297.

298. Google denies the allegations in Paragraph 298.

299. Paragraph 299 contains legal conclusions to which no response is required and, on that basis, Google denies the allegations in Paragraph 299.

300. Google denies the allegations in Paragraph 300.

301. Google denies the allegations in Paragraph 301.

302. Google denies the allegations in Paragraph 302.

303. Google restates its response to every allegation set forth above as if stated herein.

304. Google denies the allegations in Paragraph 304.

305. Google denies the allegations in Paragraph 305.

306. Google denies the allegations in Paragraph 306.

307. Google denies the allegations in Paragraph 307.

308. Google restates its response to every allegation set forth above as if stated herein.

309. Google denies the allegations in Paragraph 309.

310. Google restates its response to every allegation set forth above as if stated herein.

311. Paragraph 311 contains legal conclusions to which no response is required; to the extent that a response is deemed necessary, Google admits the allegations in Paragraph 311.

312. Google denies the allegations in Paragraph 312.

313. Google denies the allegations in Paragraph 313.

314. Google denies the allegations in Paragraph 314

315. Google restates its response to every allegation set forth above as if stated herein.

316. Google denies the allegations in Paragraph 316.



317. Google restates its response to every allegation set forth above as if stated herein.  
Google in all other respects denies the allegations in Paragraph 317.

318. Google denies the allegations in Paragraph 318.

319. Google admits that the Commonwealth of Kentucky seeks the stated relief, but in all other respects denies the allegations in Paragraph 319.

320. Google admits that the Commonwealth of Kentucky seeks the stated relief, but in all other respects denies the allegations in Paragraph 320.

321. Google restates its response to every allegation set forth above as if stated herein.

322. Google denies the allegations in Paragraph 322.

323. Google admits that the State of Mississippi seeks the stated relief, but in all other respects denies the allegations in Paragraph 323.

324. Google restates its response to every allegation set forth above as if stated herein.

325. Google denies the allegations in Paragraph 325.

326. Google restates its response to every allegation set forth above as if stated herein.

327. Google denies the allegations in Paragraph 327.

328. Google restates its response to every allegation set forth above as if stated herein.

329. Google denies the allegations in Paragraph 329.

330. Google restates its response to every allegation set forth above as if stated herein.

331. Google denies the allegations in Paragraph 331.

332. Google restates its response to every allegation set forth above as if stated herein.

333. Paragraph 333 contains legal conclusions to which no response is required; to the extent a response is deemed necessary, Google admits the allegations in Paragraph 333.

334. Google denies the allegations in Paragraph 334.

335. Google denies the allegations in Paragraph 335.

336. Google denies the allegations in Paragraph 336.

337. Google denies the allegations in Paragraph 337.

338. Google denies the allegations in Paragraph 338.

339. Google denies the allegations in Paragraph 339.

340. Google denies the allegations in Paragraph 340.

341. Google denies the allegations in Paragraph 341.

342. Google denies the allegations in Paragraph 342.

343. Google restates its response to every allegation set forth above as if stated herein.

Google in all other respects denies the allegations in Paragraph 343.

344. Google denies the allegations in Paragraph 344.

345. Google denies the allegations in Paragraph 345.

346. Google admits that the Commonwealth of Kentucky seeks restitution and/or disgorgement and the stated civil penalties, but in all other respects denies the allegations in Paragraph 346.

347. Google admits that the Commonwealth of Kentucky seeks the stated relief, but in all other respects denies the allegations in Paragraph 347.

348. Google restates its response to every allegation set forth above as if stated herein.

349. Google denies the allegations in Paragraph 349.

350. Google admits that The State of Mississippi seeks the stated relief, but in all other respects denies the allegations in Paragraph 350.

351. Google restates its response to every allegation set forth above as if stated herein.

352. Google denies the allegations in Paragraph 352.

353. Google restates its response to every allegation set forth above as if stated herein.

354. Google denies the allegations in Paragraph 354.

355. Google restates its response to every allegation set forth above as if stated herein

356. Google denies the allegations in Paragraph 356.

357. Paragraph 357 sets forth the relief sought by Plaintiffs, to which no response is required; to the extent a response is deemed necessary, Google denies the allegations contained in Paragraph 357 and denies that Plaintiffs are entitled to any of the remedies or relief sought in the Complaint.

358. Paragraph 358 contains Plaintiffs' demand for a jury trial, to which no response is required; to the extent a response is deemed necessary, Google denies that Plaintiffs are entitled to a jury trial on any claim asserted in the Complaint.

#### **AFFIRMATIVE AND ADDITIONAL DEFENSES**

Without assuming any burden that it would not otherwise bear, Google asserts the following defenses to the Complaint. Further, Google reserves all affirmative defenses under Federal Rule of Civil Procedure 8(c) and any additional defenses, at law or in equity, that may now exist or in the future be available based on discovery and further factual investigation in this case.

##### **First Defense**

Plaintiffs' claims are barred, in whole or in part, because the Complaint fails to state a claim upon which relief can be granted.

##### **Second Defense**

The relief sought by Plaintiffs would be contrary to the public interest, harm consumers and businesses, and is otherwise inequitable, impractical, and unworkable.

##### **Third Defense**

Plaintiffs' claims are barred, in whole or in part, because the Complaint fails to allege any legally cognizable relevant product or geographic market.

#### **Fourth Defense**

Google has never had, and is unlikely to obtain, monopoly power in any properly defined relevant market for advertising services.

#### **Fifth Defense**

The agreement with Facebook noted in the Complaint is lawful under the rule of reason because Plaintiffs have failed to allege any anticompetitive effects and the agreement's procompetitive benefits clearly outweigh any alleged anticompetitive effects.

#### **Sixth Defense**

Google's conduct alleged by Plaintiffs in the Complaint was lawful, justified, procompetitive, and carried out in Google's legitimate business interests and constitutes bona fide competitive activity, the benefits of which significantly outweigh any alleged anticompetitive effects.

#### **Seventh Defense**

The Plaintiffs' claims are barred, in whole or in part, for failure to allege any plausible harm to competition or consumers.

#### **Eighth Defense**

The Plaintiffs' claims are barred, in whole or in part, because they lack standing to assert claims or seek relief on behalf of parties other than natural persons who are direct purchasers.

#### **Ninth Defense**

The Plaintiffs' claims are barred, in whole or in part, because the Complaint fails to allege a cognizable antitrust injury.

#### **Tenth Defense**

The Plaintiffs' deceptive trade practices claims are barred, in whole or in part, for failure to allege with particularity the circumstances constituting fraud or mistake and because Plaintiffs have not and cannot establish a false, misleading, or deceptive act or practice.

#### **Eleventh Defense**

The Plaintiffs' deceptive trade practices claims are barred, in whole or in part, for failure to allege an adequate nexus with one or more of the Plaintiff States.

#### **Twelfth Defense**

The Plaintiffs' claims are barred, in whole or in part, by the applicable statutes of limitations and by the doctrine of laches.

#### **Thirteenth Defense**

The Plaintiffs are not entitled to injunctive relief on conduct that occurred solely in the past.

#### **Fourteenth Defense**

To the extent that Plaintiffs seek to recover on behalf of allegedly injured consumers, those claims are barred because Plaintiffs have not identified specific consumers that qualify under the relevant statutes.

#### **Fifteenth Defense**

To the extent that Plaintiffs seek recovery of civil penalties, those civil penalties are limited by the applicable state statutes, the due process clause of the U.S. and applicable state Constitutions and, in addition, they must have a reasonable relation to the actual harm established.

Google reserves the right to supplement its Answer and affirmative and additional defenses with other defenses that become available or apparent in the course of investigation, preparation, and/or discovery, and to amend its Answer accordingly.

**PRAYER FOR RELIEF**

WHEREFORE, Google prays for relief as follows:

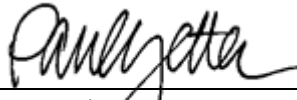
- i. That the Complaint against Google be dismissed in its entirety, with prejudice;
- ii. That Google be awarded its attorneys' fees and costs and expenses of the suit; and
- iii. That the Court award such other and further relief to Google as the Court deems just and proper.

Dated: February 22, 2021

Respectfully submitted,

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ATTORNEYS FOR DEFENDANT  
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**CERTIFICATE OF SERVICE**

I certify that on this 22nd day of February 2021, this document was filed electronically in compliance with Local Rule CV-5(a) and served on all counsel who have consented to electronic service, per Local Rule CV-5(a)(3)(A).

/s/ Bryce L. Callahan

Bryce L. Callahan